

the soul of man directly, and his body indirectly or by the operation of secondary causes. In both cases, however, He is really and truly the Creator, and there is nothing in the theory which is in any wise derogatory to His power or wisdom. We simply admit for the body of man what we have seen may readily be admitted for the rest of the animate world—creation through the agency of secondary causes, instead of direct and immediate creation without the concurrence of any of God's creatures.

This view of the derivative origin of Adam's body, is also quite in harmony with other principles laid down both by the great Bishop of Hippo and the Angel of the Schools. For they both taught, that in the beginning God created, in the absolute and primary sense of creation, only corporeal elements and spiritual substances. Plants, animals and even man, did not exist as we know them—in *natura propria*; but only potentially, receiving their full development afterwards — *per volumina sæculorum*. They existed only in what the saint calls seminal reasons—in *rationibus seminalibus*;¹ and the production of the manifold forms of life, man included, which now adorn our planet, was the work of Evolution, viz., secondary causes acting under the con-

¹ "Et ideo concedo," says St. Thomas . . . "quod rationes seminales dicuntur virtutes activæ completæ in natura cum propriis passivis, ut calor et frigus, et forma ignis, et virtus solis, et hujusmodi; et dicuntur seminales non propter esse imperfectum quod habeant, sicut virtus formativa in semine, sed quia rerum individuis primo creatis, hujusmodi virtutes collatæ sunt per opera sex dierum, ut ex eis quasi ex quibusdam seminibus producerentur et multiplicarentur res naturales." "Sentent.," lib. II, dist. 18, quæst. 1^{ma}, art. 2.

tinued and uninterrupted guidance of the Divine administration.¹

Again, this view of the origin of man's body may be regarded as conformable with the teachings of the Angelic Doctor from another standpoint. As all who are familiar with the scholastic philosophy are aware, St. Thomas, in common with the School generally, teaches that there is a true development in animated nature, a veritable ascent of life from lower to higher forms. There is, he tells us, a succession of vital principles in the organic world, superior principles superseding those which are inferior. In the development of man, as in that of the lower animals, there is an ascending succession of substantial forms, by means of which that which is destined to become a human body, acquires a proper structure and receives the necessary disposition for becoming the receptacle of a rational soul. First the embryo is animated by the vegetable soul; subsequently it is informed by a more perfect soul, which is both nutritive and sensitive. This is what is known as the animal soul. In man this is succeeded by the rational soul—*ab extrinseco immissa*, says the Angelic Doctor—a soul specially created and infused into the human body by God Himself.²

¹ "Augustinus enim vult," writes the Angelic Doctor, "in ipso creationis principio, quasdam res per species suas distinctas fuisse in natura propria, ut elementa, corpora cælestia et substantias spirituales; alia vero in rationibus seminalibus tantum, ut animalia, plantas et *homines*, quæ omnia postmodum in naturis propriis producta sunt." "Sentent.," lib. II, dist. 12^a, quæst. 1^{ma}, art. 11.

² The following passage is sufficient to exhibit the Angelic Doctor's teaching in this matter: "Quanto igitur aliqua forma

From what precedes, it is evinced that the Evolution of the body of man, according to Mivart's view, and the subsequent infusion into this body, by God, of a rational soul, is not necessarily antagonistic to the teachings of St. Thomas. The theory may, indeed, encounter certain grave difficulties in the domains of metaphysics and Biblical exegesis, but I do not think it can absolutely be asserted that such difficulties are insuperable.¹

At all events, whatever one may be disposed to think of the theory, it is well always to bear in mind that it has never been condemned by the Church, although it has been publicly discussed and defended for full five-and-twenty years. If it were as dangerous as some have imagined, and, still more, if it were heretical, as others have thought, it is most probable that the "Genesis of Species" would have been put on the Index long ago.

est nobilior et magis distans a forma elementi, tanto oportet esse pluras formas intermedias, quibus gradatim ad formam ultimam veniatur et, per consequens, plures generationes medias; et ideo in generatione animalis et hominis, in quibus est forma perfectissima, sunt plurimæ formæ et generationes intermediae, et per consequens corruptiones, quia generatio unius est corruptio alterius. Anima igitur vegetabilis, quæ primo inest, cum embryo vivit vita plantæ, corrumpitur, et succedit anima perfectior, quæ est nutritiva et sensitiva simul, et tunc embryo vivit vita animalis; hæc autem corrupta, succedit anima rationalis ab extrinseco immissa, licet precedentes fuerint virtute seminis." "Contra Gentiles," Lib. II, cap. LXXXIX.

¹ For a consideration of some of the difficulties alluded to, consult Padre Mir's "La Creacion," cap. XL, Dierck's "L'Homme-Singe," pp. 91 et seq., and Cardinal Gonzales' "La Biblia y la Ciencia," tom. I, cap. XI, art. III, IV and V.

Views of Cardinal Gonzales.

The late Cardinal Gonzales, that profound Thomist and man of science, whose untimely death the Catholic world will mourn for a long time to come, who has treated so luminously the question of Evolution from the point of view of Scripture, patristic theology and scholastic philosophy, has suggested a modification of Mivart's theory, which, he thinks, would make it more acceptable to theologians than it is as it now stands. If, he says, without however committing himself to the opinion expressed—if instead of affirming, as the English biologist does, that the body of Adam was nothing more than a fully-developed ape, into which God infused a rational soul, we admit that the body of the first man was *partly* the product of Evolution from some lower animal form, and partly the direct work of God Himself, we may thereby, he opines, eliminate many of the objections urged against the theory as formulated by its author. According to this modified view, the body of man was developed from the inferior forms of life only until a certain point, but in this condition it was not prepared to be endowed by an intelligent soul. This imperfect body, however, this unfinished product of evolutionary forces, is taken in hand by the Almighty, who perfects what was begun, gives it the finishing touches, as it were, and renders it a fit habitation, which it was not previously, for a soul which was to be made to His own image and likeness, a soul which was to be dowered

with the noble attributes of reason, liberty and immortality.

Speaking for myself, I must confess that such a modification appears unnecessary, and, in the light of the teachings of St. Augustine and St. Thomas, it seems that one may as readily accept the theory as proposed by Mivart, as the restricted form of it which the distinguished cardinal suggests. If we are to admit the action of Evolution at all, in the production of Adam's body, it appears more consistent to admit that it was competent to complete the work which it began, than to be forced to acknowledge that it was obliged to leave off its task when only partially completed. For, whether we assert that the body of the first man was entirely, or only partially, the result of evolutionary action, it was, in both cases, according to the principles we have adopted, the work, and ultimately the sole work, of Almighty God. According to Mivart's view, the body of Adam was formed by God solely through the agency of secondary causes; according to Gonzales it was formed by God partly through the concurrence of secondary causes, and partly by His direct and immediate action. If we are to admit that Evolution had anything whatever to do with man's corporeal frame, it seems more logical to admit that it finished the work which it began, always, of course, under the guidance of the Divine administration, than to suppose that God gave to His secondary agents a work which they might commence, indeed, but which, by reason of limitations imposed on them, they were unable to complete.

One cannot help thinking, when one seriously reflects on the matter, that the learned Cardinal—and what is said of him may be predicated of creationists generally—unconsciously favors the very notion he wishes to oppose. He wishes, above all things, to safeguard the creative act and bring out in bold relief the Divine attributes of wisdom and omnipotence, but he unwittingly, it would seem, makes greater demands than his case requires. Indeed, it strikes me that those who hold the special creation theory as to the body of the father of our race, and the same may be said of believers in the special creation of the forms of life below man, constitute themselves defenders of the very theory which the great St. Athanasius, full fifteen centuries ago, felt called upon to criticise adversely. Arguing against the anthropomorphic views which the heathen entertained of the Almighty, he contended that the God of the Christians is a Creator, not a carpenter—*κτίστης οὐ τεχνίτης*. In accord with the illustrious Alexandrian Doctor's view, it has been truthfully observed that: "The Great Architect theory in theology is the analogue of the *emboitement* theory in science. Both were invented when mechanism dominated thought, and we have outgrown both."

In commenting on Mivart's theory, the erudite Cardinal Archbishop of Seville manifests his characteristic liberality and breadth of view, strikingly resembling in this respect his immortal master, the Angel of the School. "As the question stands at present," he says, "we have no right to reprobate or

reject, as contrary to Christian faith, or as contrary to revealed truth, the hypothesis of Mivart; the hypothesis, namely, which admits the possibility that the body of the first man, the organism which received the rational soul created by God and infused into Adam, was a body which received an organization suitable for the reception of the human soul, not directly and immediately from the hand of God, but in virtue of the action of other antecedent animated beings, more or less perfect and similar to man in bodily structure."¹ Elsewhere he declares: "I should not permit myself to censure the opinion of the English theologian so long as it is respected, or at least tolerated, by the Church, the sole judge competent to fix and qualify theologico-dogmatic propositions, and decide regarding their compatibility or incompatibility with Holy Scripture."²

¹ "La Biblia y la Ciencia," tom. I, pp. 549-550.

² "No seré yo quien se permita calificar con nota alguna desfavorable la opinión del teólogo Inglés, mientras que sea respetada, ó tolerada al ménos, por la Iglesia, único juez competente para fijar y calificar las aserciones teológico-dogmáticas, y para decidir acerca de su compatibilidad é incompatibilidad con la Sagrada Escritura." Op. cit., tom. I, pp. 542-543. Cf., also, the interesting brochure of Fr. Dierck's, S. J., entitled "L'Homme-Singe et Les Précurseurs d'Adam en face de la Science et de la Théologie." The accomplished Jesuit discusses the question at issue in a most temperate and scholarly manner, and does ample justice to the claims of science as well as to those of Dogma.

Mgr. d'Hulst, the distinguished rector of the Catholic University of Paris, is of opinion "que l'orthodoxie rigoureuse n'impose d'autre limite aux hypothèses transformistes, que le dogme de la création immédiate de chaque âme humaine par Dieu; hors de là, s'il y a des témérités dans ces hypothèses, c'est par des arguments scientifiques qu'il faut les combattre." *Compte Rendu du Congrès Scientifique International des Catholiques, tenu à Paris, 1891, Section d'Anthropologie, p. 213.* In a carefully prepared paper, read before the International Catholic

Opinions of Other Writers.

Not to mention a number of other Catholic writers who might be named, Mivart's theory has an able defender in the learned French Dominican, Père Leroy. His thesis in its simplest form may be expressed as follows: It is probable that God, in creating Adam, did not make use directly of the slime of the earth, but that, by the sole infusion of a rational soul, he transformed into man an anthropomorphic animal which had been brought by Evolution, under the guidance of Divine Providence, to a point approximating humanity as nearly as possible. The argument of the author is well sustained, and his work, entitled "L'Évolution Restreinte des Espèces Organiques," besides having the *imprimatur* of the provincial and *ensor librorum* of his order, has the cordial indorsement of such distinguished authorities as the eminent Catholic geologist, Prof. A. de Lapparent, and the well-known theologian, Père Monsabré. The latter, in a letter to Père Leroy, printed in the beginning of the volume,

Scientific Congress at Brussels, in 1894. Canon Duilhé de Saint-Projet, the noted French apologist, in referring to the theory of the animal origin of man, remarked, with enlightened breadth of view, "Ici, comme pour toutes les opinions libres ou tolérées au point de vue de l'orthodoxie, l'Église est le seul juge." See *Compte Rendu, Section d'Anthropologie, p. 10.*

As illustrative of the attitude of the anthropological section of the same congress, the following resolution, adopted by acclamation, is significant: "La section d'anthropologie du troisième Congrès Scientifique des Catholiques de Bruxelles, loue et encourage les études de ceux qui, sous le suprême magistère de l'Église enseignante, s'adonnent à rechercher le rôle que l'Évolution peut avoir eu dans le concert des causes secondes qui ont amené le monde physique à l'état actuel." *Compte Rendu, p. 298.*

writes: "One may not be of your opinion, because there is question of but an opinion only, but I do not see in what anyone can find fault with your orthodoxy. Science progresses and its discoveries permit us to see better every day the grandiose unity of creation. Whatever be its progress, it will never efface from the first pages of the Bible these two truths: all creation is the work of God; and there are in this creation acts of such transcendence that they can be attributed only to the immediate and effective intervention of an Infinite Power."

From the foregoing it is evident, that whatever may be the final proved verdict of science in respect of man's body, it cannot be at variance with Catholic Dogma. Granting that future researches in paleontology, anthropology and biology, shall demonstrate beyond doubt that man is genetically related to the inferior animals, and we have seen how far scientists are from such a demonstration, there will not be, even in such an improbable event, the slightest ground for imagining that then, at last, the conclusions of science are hopelessly at variance with the declarations of the sacred text, or the authorized teachings of the Church of Christ. All that would logically follow from the demonstration of the animal origin of man, would be a modification of the traditional view regarding the origin of the body of our first ancestor. We should be obliged to revise the interpretation that has usually been given to the words of Scripture which refer to the formation of Adam's body, and read these words in the sense which Evolution demands, a sense which,

as we have seen, may be attributed to the words of the inspired record, without either distorting the meaning of terms or in any way doing violence to the text.¹

¹ As illustrations of the extravagant notions, which even eminent men have entertained respecting the origin of our first ancestors, the following paragraphs are pertinent.

Many of the mediæval rabbins, following the teachings of the cosmogonies of India, Persia, Chaldea, Phœnicia, and the account of primitive man as given by Plato in his "Symposium," were believers in the androgynous character of the common father of humanity. The philosopher, Maimonides, expressly declares: "Adam et Eva creati sunt sicut unus, et tergis vel dorso conjuncti. Postea vero a Deo divisi sunt, qui dimidiam partem accepit, et fuit Eva, et adducta est ad ipsum."

The eminent French naturalist, Isidore Geoffroy Saint-Hilaire, was not unfavorable to this view. "On a cherché," he writes, "à expliquer l'hermaphrodisme dans l'espèce humaine, par la réunion de deux sexes chez notre premier père; réunion formellement énoncé dans ce verset de la Genèse, cap. i, ver. 27. 'Et creavit Deus ad imaginem suam, ad imaginem Dei creavit illum, masculum et feminam creavit eos.' On pourrait sans doute trouver dans ce verset, à plusieurs égards remarquable, un emblème de l'état primitivement indecis, ou, si l'on veut, hermaphroditique, de l'appareil sexuel, comme on a trouvé dans *l'œuvre des six jours* celui du développement progressif de la vie végétale et animale, et de l'apparition tardive de l'homme à la surface du globe." "Histoire Générale et Particulière des Anomalies de l'Organization chez l'Homme," vol. II, p. 53.

Among modern scholars who have inclined to the primitive androgynous condition of Adam, and the subsequent formation of Eve by separation or division, is the distinguished orientalist, François Lenormant. In his "Origines de l'Histoire d'après la Bible," pp. 54 and 55, he expresses himself as follows: "D'après notre version vulgate, d'accord en ceci avec la version grecque des Septante, nous avons l'habitude d'admettre que, selon la Bible, la première femme fut formée d'une côte arrachée au flanc d'Adam. Cependant, on doit sérieusement douter de l'exactitude de cette interprétation. Le mot employé ici, signifie dans tous les autres passages bibliques où on le rencontre, 'côté' et non côte. La traduction philologiquement la plus probable du texte de la Genèse est donc celle que nous avons adoptée plus haut. 'Yaveh Elohim fit tomber un profond sommeil sur l'homme, et celui-ci s'endormit; il prit un de ses côtés et il en ferma la place avec la chair. Et Yaveh Elohim forma le côté qu'il avait pris à l'homme en femme. Et l'homme

Interpretation Not Revelation.

In the consideration of questions like the present, we must never, be it remembered, lose sight of the fact that interpretation is not revelation; neither is revelation interpretation. Superficial readers are but too frequently misled into believing, that the declarations of the Bible must necessarily bear the meaning which commentators have fancied they should have, when, as a matter of fact, the real sense is often entirely different, if not, indeed, quite the contrary. The opinions of men may change, and are, of a truth, perpetually changing, but the declarations of the Holy Spirit are ever infallible and immutable. We can never too carefully discriminate between the truth of God's revelation to His creatures, and the truth of our apprehension of His revelation. In the beginning we may have but occasional glimpses and faint adumbrations of the truth, and it often happens that we come into possession of the whole truth, in all its significance and beauty and grandeur, only after the lapse of long ages of persistent effort and tireless investigation. Hence the anthropomorphic and anthropocentric views entertained by the early interpreters of Scripture respecting divers questions pertaining to the Deity, and the creatures which are the work of His omnipotence. Time and reflection and research show that such views are ill-founded, and substitute in their place a nobler conception of the Creator, and one that is, at the same

dit: Cette fois celle-ci est l'os de mes os et la chair de ma chair; celle-ci sera appelée isschâh (femme), parce qu'elle a été prise du isch (l'homme)."

time, more in accordance with the teachings of nature and the spirit of Divine revelation.

It is possible, although highly improbable, that the evolutionary theory of the origin of Adam's corporeal frame is one of such cases. And it is possible, too, that our successors in the enjoyment of light that is not vouchsafed to ourselves, may be willing to admit as a scientific doctrine, what we, at present, are not justified in considering as more than a fanciful and unwarranted hypothesis. Nevertheless, be this as it may, we must not forget what has already been adverted to when discussing the derivative origin of animals and plants, viz., that Evolution is not a theory of creation or cause, but one of order and method; a *modus creandi* which the Deity was pleased to adopt. Of the origin of matter, of life, of spirit, science, as such, can give us no information. As to the origin of matter, Evolution, as a doctrine, is confessedly mute. "Of the origin of life it does not profess to have the slightest knowledge; of the character of the in-dwelling force, which out of the one original cell develops the marvelous diversity of architecture in the individual beings, of the variations which gave a start to the process of natural selection in the differentiation of species, it can tell us nothing; of the marvelous adaptation of the external conditions of the inorganic world to the growth and differentiation of organic life, it gives no account; the unity of all this infinite variety of development in one great order, having a continual progress towards a higher perfection, it sees clearly, but it cannot find a cause. No wonder that, as we

have seen, those who study it most deeply and philosophically are driven to go behind it in the search after a true cause. . . . For clearly the development under fixed laws and gradual process of the organic world, no more prevents the original creative and directive Idea from being the true Cause of all, than the passing of the individual being through all stages of embryonic existence from the simple cell, makes it less the creature of the Supreme Hand. That the archetypal idea of the Creative Mind may fulfill itself equally, whether it act directly or through intermediate gradations, we can see clearly not only by abstract theory but by experience of our own 'creations.'"¹

¹"Some Lights of Science on the Faith," by Alfred Barry, D.D., D.C.L., pp. 111 and 112.

CHAPTER VII.

TELEOLOGY, OLD AND NEW.

The Doctrine of Final Causes.

FROM what precedes it is evident, that the most that Evolution can do is to substitute derivative for special creation, a substitution which, as we have learned, can be admitted without any derogation whatever to either faith or Dogma. But there is yet another objection against Evolution, which, by some minds, is regarded as more serious than any of the difficulties, heretofore considered, of either philosophy or theology. This objection, briefly stated, is that Evolution destroys entirely the argument from design in nature, and abolishes teleology, or the doctrine of final causes. In the case of Darwin, for instance, as we learn from his "Life and Letters," he had no difficulty in accepting derivative in lieu of special creation, but when it came to reconciling natural selection and Evolution with teleology, as taught by Paley, he felt that his chief argument for believing in God had been wrested from him entirely.

So persuaded, indeed, have many naturalists and philosophers been, if we are to believe their own words, that Darwinism and Evolution have given the deathblow to teleology, that they forthwith